



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,538	12/10/2004	Jean-Christophe Dupuy	FR 020701	5675

65913 7590 11/30/2007
NXP, B.V.
NXP INTELLECTUAL PROPERTY DEPARTMENT
M/S41-SJ
1109 MCKAY DRIVE
SAN JOSE, CA 95131

EXAMINER

HOLLIDAY, JAIME MICHELE

ART UNIT	PAPER NUMBER
----------	--------------

2617

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

11/30/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No. 10/517,538	Applicant(s) DUPUY ET AL.	
	Examiner Jaime M. Holliday	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 5, 12 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 13 and 15-21 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Response to Arguments

1. Applicant's arguments with respect to **claims 1-4, 6-11, 13 and 15-21** have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. **Claim 10** is objected to because of the following informalities:
 - a) Replace the punctuation "." following --transit-- on line 12, with the punctuation ",", to correct a typographical error.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 1-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Vilppula et al. (Pub # U.S. 2002/0019698 A1)** in view of **Roel-Ng et al. (U.S. Patent # 6,002,936)**, and in further view of **Orler et al. (US 7,076,256 B1)**.

Consider **claim 1**, Vilppula et al. clearly show and disclose a method for position determination in which one or more application (**201, 202**) requests a positioning method selection device (**204**), reading on the claimed "mobile equipment," for positioning data. The positioning method selection device provides an application with positioning data using one or more **positioning methods (205 to 209)**, reading on the claimed "***position determination device***," in accordance with settings defined by the application and/or the user, reading on the claimed "method for generating position information in a mobile equipment provided with at least two position determination devices," (abstract and figure 2), the method comprising the following steps: maintaining a centralized register on at least one positioning property of said one or more positioning method, reading on the claimed "allocating to each position determination device at least one stored parameter value," (paragraph 15), applications defining parameters relating to the positioning data requested, such as a required accuracy or the type and format of the positioning data, reading on the claimed "determining a context information," (paragraph 44), automatically determining the best possible positioning method available for use by the terminal's applications, based on

requirements specifying the quality of service (Quality of Positioning, QoP) defined by the user or the application, without having to know the behavior of the available positioning methods under different conditions, reading on the claimed "depending on the context information, choosing a corresponding position determination device selection process based on the value of said at least one parameter for each position determination device," (paragraph 7), and selecting a positioning method for use that fulfils at least one specified condition for selecting a positioning method, reading on the claimed "selecting a position determination device according to the chosen selection process," (paragraph 18).

However, Vilppula et al. do not specifically disclose that the positioning methods are activated upon selection.

In the same field of endeavor, Roel-Ng et al. clearly show and disclose telecommunications method for allowing a cellular network to determine the optimum positioning method, reading on the claimed "method for generating position information," (abstract). When a Requesting Application (RA) **380** sends a positioning request for a particular mobile station (MS) **300** to a Mobile Positioning Center (MPC) **370**, the RA can also include quality of service information, such as data rate and/or reliability of the positioning information returned by the cellular network (MPC) performing the positioning, reading on the claimed "context information," (col. 4 lines 41-49, figure 3). When a positioning request comes in to the MPC, it must then determine the optimum positioning method, reading on the claimed "position determination device," based upon the

available network-based and terminal-based positioning methods and the quality of service requested by the RA, reading on the claimed "depending on the context information, choosing a corresponding position determination device selection process based on the value of said at least one parameter for each position determination device," (col. 5 lines 33-38). Once the positioning method has been chosen, the positioning request, along with the positioning method, is sent to the serving MSC/VLR **350**, which then forwards the positioning requests to a serving Base Station Controller (BSC) **340**. If the MS is idle mode, the serving MSC/VLR must page the MS and setup a call prior to forwarding the request to the BSC, reading on the claimed "activating said selected position determination device," (col. 5 lines 38-46). If the positioning method is a terminal-based positioning method, the BSC sends the positioning request to the MS collects the positioning data, and if the MS has calculation abilities, the MS determines its location, reading on the claimed "method for generating position information in a mobile equipment," (col. 5 lines 56-61).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to page or setup a call to the mobile station in order to activate the terminal-based positioning method as taught by Roel-Ng et al. in the method Vilppula et al., in order to successfully determine the position of a terminal device.

However, Vilppula et al., as modified by Roel-Ng, do not specifically disclose that if the position method does not use the requested format, the position data is converted.

In the same field of endeavor, Orlor et al. clearly show and disclose a cellular telephone for use with a cellular telephone network includes a GPS receiver (abstract). The GPS system can be used in an autonomous mode, for example, when the GPS receiver is receiving a strong signal, has recent ephemeris or almanac data, or when an exact position is not required. However, if the GPS system is not receiving a strong enough GPS signal, e.g., the handheld cellular device is being used indoors, the GPS system can switch to a different mode of operation, e.g., a mode of operation where the cellular system helps or "aids" the GPS system to acquire, track, and/or navigate using the GPS signals received by the GPS receiver and additional position information supplied by the cellular system. This mode of operation is called a "network-aided" mode. The position information includes measurements made by the communication network that assist in the determination of the position of the handset, reading on the claimed "context information, including whether a user is in transit, on foot, or indoors," (col. 3 line 60- col. 4 line 16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a different positioning mode when a device is indoor or outdoor as taught by Orlor et al. in the method Vilppula et al.,

as modified by Roel-Ng et al., in order to successfully determine the position of a terminal device.

Consider **claim 2**, the combination of Vilppula et al. and Roel-Ng et al., as modified by Orlor et al., disclose the claimed invention **as applied to claim 1 above**, and in addition, Vilppula et al. further disclose parameters describing the quality of the positioning data provided by positioning method x is stored in register **115**, where x indicates the positioning method in use and is an integer between 1 and the number of available positioning methods, reading on the claimed "at least two stored parameter values are allocated to each position determination device," (paragraph 48).

Consider **claim 3**, the combination of Vilppula et al. and Roel-Ng et al., as modified by Orlor et al., disclose the claimed invention **as applied to claim 2 above**, and in addition, Vilppula et al. further disclose parameters describing the quality of the positioning data (Quality of Position QoP), such as the positioning accuracy requested by application n, is stored in a register **114**, reading on the claimed "stored parameter values include at least one among an accuracy value, a response time value and a power consumption value," (paragraph 47).

Consider **claim 4**, the combination of Vilppula et al. and Roel-Ng et al., as modified by Orlor et al., disclose the claimed invention **as applied to claim 3 above**, and in addition, Vilppula et al. further disclose that a user can define parameters relating to position determination directly to the PMSD through the user interface instead of giving definitions separately to each application. The

user can define, for example, the accuracy with which applications receive positioning data or which positioning method the user prefers to use as the first-choice positioning method, reading on the claimed "ranking the position determination devices depending on the chosen selection process," (paragraph 56) and the PMSD makes use of its monitoring capability to select the best possible positioning method for each of the sequence of requests, reading on the claimed "selecting an available position determination device of best rank," (paragraph 53).

5. **Claims 6-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of **Vilppula et al. (Pub # U.S. 2002/0019698 A1)** and **Roel-Ng et al. (U.S. Patent # 6,002,936)** in view of **Oler et al. (US 7,076,256 B1)**, and in further view of **Ludwig (U.S. Patent # 6,256,498 B1)**.

Consider **claim 6**, and **as applied to claim 1 above**, the combination of Vilppula et al. and Roel-Ng et al., as modified by Oler et al., clearly show and disclose the claimed invention except that the positioning methods include physical position data and logic position data.

In the same field of endeavor, Ludwig clearly shows and discloses a mobile station (MS) for a digital cellular communication network (GSM) supporting WWW services comprises a mobile device interface adapted to establish a connection to a mobile device (MD) being connected to the mobile station, to receive a request for the location specific data from the mobile device

and to transfer the location specific data to the mobile device. The transfer of location specific data to a server being linked to the mobile device via a global data bearer services network allows for the provision of location dependent WWW services at the mobile device (abstract). Cell IDs or base station identity codes received and selected by the mobile station MS are transferred as location data to the mobile device on request therefrom. A WWW application running on the mobile device MD includes all cell IDs or base station identity codes into an appropriate request written in hypertext transmission protocol HTTP. This HTTP request is then transferred to a WWW server (col. 8 lines 7-15). The actual estimation of the geometrical location necessary to provide location dependent WWW services is carried out within the WWW server. The mapping table 18 comprises a correspondence between *cell IDs or base station identity codes BSCI (logic position data)* and exact *geographical positions in terms of latitude and longitude (physical position data)* of respective cells and base station sub-systems. Therefore, once the cell IDs or base station identity codes BSCI are available within the WWW server, the geometrical location of the mobile station MS is calculated, reading on the claimed "position data include physical position data and logic position data," (col. 8 lines 42-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to correspond cell IDs and geographical positions as taught by Ludwig in the method of Vilppula et al. and Roel-Ng et al., as modified by Orlor et al., in order to obtain location-related information.

Consider **claim 7**, the combination of Vilppula et al. and Roel-Ng et al., as modified by Orlor et al. and Ludwig, disclose the claimed invention **as applied to claim 6 above**, and in addition, Vilppula et al. further disclose that the conditions set by the user relating to selection of a positioning method can also comprise the desired accuracy of the requested positioning data (e.g. longitudes, latitudes, distance from a given point), reading on the claimed “physical position data include Cartesian coordinates and longitude/latitude,” (paragraph 9).

Consider **claim 8**, the combination of Vilppula et al. and Roel-Ng et al., as modified by Orlor et al. and Ludwig, disclose the claimed invention **as applied to claim 6 above**, and in addition, Ludwig further discloses that a WWW application running on the mobile device MD includes all cell IDs or base station identity codes into an appropriate request written in hypertext transmission protocol HTTP, reading on the claimed “logic position data include radiofrequency beacon identifiers,” (col. 8 lines 14-15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include cell IDs as taught by Ludwig in the method of Vilppula et al. and Roel-Ng et al., as modified by Orlor et al., in order to obtain location-related information.

Consider **claim 9**, the combination of Vilppula et al. and Roel-Ng et al., as modified by Orlor et al. and Ludwig, disclose the claimed invention **as applied to claim 8 above**, and in addition, Ludwig further discloses that the mapping table **18** comprises a correspondence between *cell IDs or base station identity codes*

BSCI (logic position data) and exact geographical positions in terms of latitude and longitude (*physical position data*) of respective cells and base station sub-systems. Therefore, once the cell IDs or base station identity codes BSCI are available within the WWW server, the geometrical location of the mobile station MS is calculated, reading on the claimed "conversion step comprises reading from a table physical coordinates corresponding to at least one beacon identifier," (col. 8 lines 42-60).

6. **Claims 10, 11, 13 and 15-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Vilppula et al. (Pub # U.S. 2002/0019698 A1)** in view of **Orler et al. (US 7,076,256 B1)**.

Consider **claim 10**, Vilppula et al. clearly show and disclose positioning methods, reading on the claimed "position determination devices," are connected to the positioning method selection device (PMSD) through an interface **110**. The interface can comprise, for example, a serial port or the like for the connection of an external positioning method, as well as interfaces for positioning methods integrated in the terminal and, for example, for positioning-related services provided by a mobile communication network, reading on the claimed "mobile equipment having data processing capabilities, comprising: at least two position determination devices each capable of delivering position information of the mobile equipment in a specific format," (paragraph 45), parameter (or parameters) describing the quality of the positioning data provided by positioning

method x is stored in register **115**, reading on the claimed "driver," where x indicates the positioning method in use and is an integer between 1 and the number of available positioning methods, and the value of the parameter (or parameters) describing the quality actually achieved by the positioning data provided by method x is stored in register **117**, reading on the claimed "driver," when said positioning method returns the positioning data requested by application n to the PMSD, reading on the claimed "at least two drivers for said position determination devices, each driver being capable of storing and retrieving at least one parameter associated with the position determination device," (paragraphs 48 and 50), and control means **111** to **113** control the operation of the various functional blocks of the PMSD as well as data transmission between them. The control means comprise a controller **111**, which can be implemented, for example, as a microprocessor or equivalent means for controlling the functions of the PMSD. The control means further comprise a random access memory **112**; as well as a permanent memory **113** for storing commands required for the control of the PMSD functions. Parameters describing the quality of the positioning data provided by positioning method x is stored in register **115**. The user can define parameters, which represent conditions on the basis of which a positioning method to be used is selected, through user interface **307**. Said conditions can comprise, for instance, the positioning methods the user allows to be used by certain applications at a given time and the order in which the user prefers the positioning methods to be used.

The parameters provided by the user are stored (ref. 310) in register **308**, from which the PMSD can retrieve them (ref. 312), reading on the claimed “a location handling unit in communication with said drivers and capable of communicating with an application for providing position information, said location handling unit being capable of selecting a position determination device to be used for obtaining position information based on a context information and on the values of said parameters stored in the drivers wherein each driver is capable of storing and retrieving at least two different parameters and said location handling unit is adapted to receive a context message from said application and a priority of parameters is established as a function of said context message,” (paragraphs 46, 48, 57).

However, Vilppula et al., as modified by Roel-Ng, do not specifically disclose that if the position method does not use the requested format, the position data is converted.

In the same field of endeavor, Orlor et al. clearly show and disclose a cellular telephone for use with a cellular telephone network includes a GPS receiver (abstract). The GPS system can be used in an autonomous mode, for example, when the GPS receiver is receiving a strong signal, has recent ephemeris or almanac data, or when an exact position is not required. However, if the GPS system is not receiving a strong enough GPS signal, e.g., the handheld cellular device is being used indoors, the GPS system can switch to a different mode of operation, e.g., a mode of operation where the cellular system

helps or "aids" the GPS system to acquire, track, and/or navigate using the GPS signals received by the GPS receiver and additional position information supplied by the cellular system. This mode of operation is called a "network-aided" mode. The position information includes measurements made by the communication network that assist in the determination of the position of the handset, reading on the claimed "context information, including whether a user is in transit, on foot, or indoors," (col. 3 line 60- col. 4 line 16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a different positioning mode when a device is indoor or outdoor as taught by Orlor et al. in the method Vilppula et al., in order to successfully determine the position of a terminal device.

Consider **claim 11**, Vilppula et al., as modified by Orlor et al., clearly show and disclose the claimed invention **as applied to claim 10 above**, and in addition, Orlor et al. further disclose that the GPS system can be used in an autonomous mode, for example, when the GPS receiver is receiving a strong signal, has recent ephemeris or almanac data, or when an exact position is not required. However, if the GPS system is not receiving a strong enough GPS signal, e.g., the handheld cellular device is being used indoors, the GPS system can switch to a different mode of operation, e.g., a mode of operation where the cellular system helps or "aids" the GPS system to acquire, track, and/or navigate using the GPS signals received by the GPS receiver and additional position information supplied by the cellular system, reading on the claimed "position

determination devices are selected from the group comprising cell-based positioning devices, satellite-based positioning devices and beacon-based positioning devices,” (col. 3 line 60- col. 4 line 16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a different positioning modes (GPS and/or cellular) when a device is indoor or outdoor as taught by Orler et al. in the method Vilppula et al., in order to successfully determine the position of a terminal device.

Consider **claim 13**, Vilppula et al., as modified by Orler et al., clearly show and disclose the claimed invention **as applied to claim 10 above**, and in addition, Vilppula et al. further disclose parameters describing the quality of the positioning data (Quality of Position QoP), such as the positioning accuracy requested by application n, is stored in a register **114**, reading on the claimed “stored parameter values include at least one among an accuracy value, a response time value and a power consumption value,” (paragraph 47).

Consider **claim 15**, Vilppula et al., as modified by Orler et al., clearly show and disclose the claimed invention **as applied to claim 10 above**, and in addition, Vilppula et al. further disclose that the user can define conditions relating to the positioning methods, such as an order of preference and whether the user wishes a certain positioning method to be available for use or removed from use, directly to the PMSD, reading on the claimed “location handling unit comprises a ranking means capable of storing a set of position determination

devices with a preference order according to the parameter(s) of higher priority," (paragraph 33).

Consider **claim 16**, Vilppula et al., as modified by Orlor et al., clearly show and disclose the claimed invention **as applied to claim 15 above**, and in addition, Vilppula et al. further disclose that the PMSD knows the number of positioning methods available at any given time and their operating state at that time (e.g. in use/not in use) as well as their performance under the prevailing conditions. The highest priority positioning method in the order of preference defined by the user and/or application is examined. The PMSD can monitor the number of available positioning methods and the operating state of each positioning method, or each method can be used in turn and, if a certain positioning method is not available at a particular moment, the next positioning method is selected for use, reading on the claimed "location handling unit comprises an availability checking means for checking whether a preferred position determination device in said set is available or not and, in the negative, for checking the next preferred position determination device," (paragraphs 8, 61).

Consider **claim 17**, Vilppula et al., as modified by Orlor et al., clearly show and disclose the claimed invention **as applied to claim 10 above**, and in addition, Vilppula et al. further disclose that the PMSD may access previously stored positioning data obtained from any appropriate positioning method and combine that with newly received positioning data. In this embodiment, it is

advantageous to associate a time-stamp with each positioning request, so that the most recently obtained positioning results can be selected for combination. A period of validity may also be defined for the positioning data, such that stored positioning data is deleted once its period of validity expires, reading on the claimed "location handling unit is capable of providing to said application position data together with accuracy information relating to said data," (paragraph 55).

7. **Claims 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Vilppula et al. (Pub # U.S. 2002/0019698 A1)** in view of **Orler et al. (US 7,076,256 B1)**, and in further view of **Yabe et al. (Pub # U.S. 2003/0013458 A1)**.

Consider **claim 18**, and **as applied to claim 10**, Vilppula et al., as modified by Orler et al., clearly show and disclose the claimed invention except that data is converted.

In the same field of endeavor, Yabe et al. clearly show and disclose a Subscriber information management unit GWS2 stores and manages information relating to a subscriber of a packet communication service using mobile packet communication network MPN. System control unit GWS1, upon receiving a GET request from mobile station MS in mobile packet communication network MPN, carries out a search for a URL included in the GET request (paragraph 43). In the case that a GET request of HTTP transmitted from mobile station MS includes a URL of each submenu item of "location-related information service", data distribution management unit GWS3 extracts the base station ID which base

station BS adds to the GET request. Data distribution management unit GWS3 extracts location-related information including the area name read out from location-related information database GWS4 and distributes the information to mobile station MS. A data format of location-related information to be stored in location-related information database GWS4 can take an arbitrary form, but data transmitted from gateway server GWS to mobile station MS must be HTML data. Thus, in the case that the data format of location-related information is not in an HTML format, a conversion of the data format is performed by gateway server GWS, reading on the claimed "position data conversion unit in communication with said location handling unit," (paragraph 50 and 51).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to convert location data into a format for the mobile station as taught by Yabe et al. in the method Vilppula et al., as modified by Orlor et al., in order to obtain location-related information.

Consider **claim 19**, the combination of Vilppula et al. and Orlor et al., as modified by Yabe et al., clearly show and disclose the claimed invention **as applied to claim 18 above**, and in addition, Yabe et al. further disclose that a data format of location-related information to be stored in location-related information database GWS4 can take an arbitrary form, but data transmitted from gateway server GWS to mobile station MS must be HTML data, reading on the claimed "location handling unit is responsive to data format requirement

information provided by the application for requesting conversion by said position data conversion unit," (paragraph 51).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to convert location data into a format for the mobile station as taught by Yabe et al. in the method Vilppula et al., as modified by Orlor et al., in order to successfully determine the position of a terminal device.

Consider **claim 20**, the combination of Vilppula et al. and Orlor et al., as modified by Yabe et al., clearly show and disclose the claimed invention **as applied to claim 19 above**, and in addition, Vilppula et al. further disclose that the PMSD may access previously stored positioning data obtained from any appropriate positioning method and combine that with newly received positioning data. In this embodiment, it is advantageous to associate a time-stamp with each positioning request, so that the most recently obtained positioning results can be selected for combination. A period of validity may also be defined for the positioning data, such that stored positioning data is deleted once its period of validity expires, reading on the claimed "position history unit capable of storing a plurality of position data together with time/date information," (paragraph 55).

8. **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of **Vilppula et al. (Pub # U.S. 2002/0019698 A1)** and **Roel-Ng et al. (U.S.**

Patent # 6,002,936), in view of **Orler et al. (US 7,076,256 B1)**, and in further view of **Yabe et al. (Pub # U.S. 2003/0013458 A1)**.

Consider **claim 2**, the combination of Vilppula et al. and Roel-Ng et al., as modified by Orler et al., disclose the claimed invention **as applied to claim 1 above**, and in addition, Vilppula et al. further disclose the PMSD knows the number of positioning methods available at any given time and their operating state at that time (e.g. in use/not in use) as well as their performance under the prevailing conditions. The application (or applications) form the parameter value or values indicating the quality of the positioning required, and send it (them) to the PMSD, whereupon the PMSD is able to select the most suitable positioning method to provide the positioning data on the basis of the received parameter (or parameters) and provides the positioning data to the application (or applications) in the correct format, i.e. in a format requested by the application, reading on the claimed "identifying a position data format as requested by an application, determining whether a currently active position determination device supplies data according to this format," (paragraphs 8, 31).

However, the combination of Vilppula et al. and Roel-Ng et al., as modified by Orler et al., fail to specifically disclose that the positioning data is converted.

In the same field of endeavor, Yabe et al. clearly show and disclose a Subscriber information management unit GWS2 stores and manages information relating to a subscriber of a packet communication service using mobile packet communication network MPN. System control unit GWS1, upon receiving a GET

request from mobile station MS in mobile packet communication network MPN, carries out a search for a URL included in the GET request (paragraph 43). In the case that a GET request of HTTP transmitted from mobile station MS includes a URL of each submenu item of "location-related information service", data distribution management unit GWS3 extracts the base station ID which base station BS adds to the GET request. Data distribution management unit GWS3 extracts location-related information including the area name read out from location-related information database GWS4 and distributes the information to mobile station MS. A data format of location-related information to be stored in location-related information database GWS4 can take an arbitrary form, but data transmitted from gateway server GWS to mobile station MS must be HTML data. Thus, in the case that the data format of location-related information is not in an HTML format, a conversion of the data format is performed by gateway server GWS, reading on the claimed "converting the position data supplied by the currently active position determination device into the requested position data format," (paragraph 50 and 51).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to convert location data into a format for the mobile station as taught by Yabe et al. in the method Vilppula et al., as modified by Roel-Ng et al., in order to obtain location-related information.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaime M. Holliday whose telephone number is (571) 272-8618. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/517,538
Art Unit: 2617

Page 23

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jaime Holliday

Patent Examiner

JEAN GELIN
PRIMARY EXAMINER

